

IN THE CLAIMS:

Kindly amend claim 1, as marked (currently amended) and add new claims 15 - 17, as marked (new) hereinbelow.

The current status of the claims currently in this application is as follows:

1. (Currently Amended) A transient load generator for testing a microelectronic power delivery system, the generator comprising:
  - a first voltage source;
  - a control circuit coupled to the first voltage source;
  - a transistor having a gate region coupled to the control circuit; and
  - a second voltage source coupled to a drain region and a source region of the transistor.
2. (Original) A power regulation system comprising the transient load generator of claim 1.
3. (Original) A transient load generator for testing a microelectronic power delivery system, the generator comprising:
  - a first voltage source having a first output voltage;
  - a second voltage source having a second output voltage, wherein the second output voltage is greater than the first output voltage;
  - a first current source coupled to the second voltage source;
  - a second current source coupled to the second voltage source;
  - a control circuit configured to receive an input trigger signal and transmit a corresponding signal to the second current source to switch the current source from an off state to an on state;
  - a first transistor coupled to the first voltage source and the first current source; and
  - a second transistor coupled to the second voltage source and the first transistor.

4. (Original) The transient load generator of claim 3, wherein the first current source is coupled in parallel to the second current source.

5. (Original) The transient load generator of claim 3, wherein the first transistor is a bipolar transistor having a base region coupled to the first current source and a collector region coupled to the first voltage source.

6. (Original) The transient load generator of claim 3, wherein the second transistor is a bipolar transistor having a base region coupled to the second current source, a collector region coupled to the second voltage source, and an emitter region coupled to the first transistor.

7. (Original) The transient load generator of claim 3, further comprising a resistor coupled between the first current source and the first transistor.

8. (Original) The transient load generator of claim 3, further comprising a diode coupled to the second current source.

9. (Original) The transient load generator of claim 3, further comprising a diode coupled to the first current source.

10. (Original) A power regulation system comprising the transient load generator of claim 3.

11. (Original) A transient load generator for testing a microelectronic power delivery system, the generator comprising:

a first voltage source having a first output voltage;

a second voltage source having a second output voltage, wherein the second output voltage is greater than the first output voltage;

a current source coupled to the second voltage source;

a first transistor coupled to the current source and to ground; and  
a second transistor coupled to the current source and to ground.

12. (Original) The transient load generator of claim 11, wherein the first and second transistors comprise MOS transistors.

13. (Original) The transient load generator of claims 12, wherein a gate region of the first transistor is coupled to the gate region of the second transistor.

14. (Original) A power regulation system comprising the transient load generator of claim 11.

15. (New) A transient load generator for testing a microelectronic power delivery system, the generator comprising:

- a first voltage source having a first output voltage;
- a control circuit coupled to the first voltage source;
- a transistor having a gate region coupled to the control circuit; and
- a second voltage source having a second output voltage coupled to a drain region of the transistor, wherein the second output voltage is greater than the first output voltage.

16. (New) A power regulation system comprising the transient load generator of claim 15.

17. (New) A transient load generator in accordance with claim 15 wherein:  
said transistor is an N Channel Field Effect Transistor.